élan diagnostics



SUMMARY OF 510(K) SAFETY AND EFFECTIVENESS INFORMATION

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The ATAC PAK BUN Reagent Kit, the ATAC Calibrator and the ATAC 8000 Random Access Chemistry System are intended for use as a system for the quantitative determination of urea nitrogen in serum, plasma and urine. Urea nitrogen results are used in the diagnosis and treatment of certain renal and metabolic diseases.

The ATAC PAK BUN Reagent determines urea nitrogen through the enzymatic action of urease and glutamate dehydrogenase. The resulting decrease in absorbance at 340 nm is proportional to the urea nitrogen concentration of the sample.

The ATAC PAK BUN Reagent Kit and ATAC Calibrator are substantially equivalent to the Beckman Synchron BUN Reagent Kit, product no. 442750, which is currently marketed by Beckman Coulter Inc. of Brea California.

The effectiveness of ATAC PAK BUN Reagent Kit and the ATAC Calibrator used on the ATAC 8000 Random Access Chemistry System is shown by the following studies.

The recovery of urea nitrogen using the ATAC PAK BUN Reagent is linear from 2 to 100 mg/dL as shown by the recovery of linearity standards that span the usable range. Regression statistics, which compare standard recoveries to standard values in both ranges, are shown below.

(ATAC Recoveries) =
$$0.5 \text{ mg/dL} + 1.0250 \text{ x}$$
 (Standard Value), $r = 0.9991$, $sy.x = 1.9 \text{ mg/dL}$, $df = 58$

Precision is demonstrated by the replicate assay of commercially available control serum. Precision statistics, calculated analogous to the method described in NCCLS Guideline EP3-T, are shown below.

Precision of BUN Recoveries in mg/dL

Sample	n		Within Run		Total	
		mean	1SD	%CV_	1SD	%CV
Serum 1	60	8	0.7	9.2%	0.7	9.1%
Serum 2	60	37	1. i	3.0%	1.4	3.7%
Serum 3	60	65	2.5	3.9%	2.5	3.9%
Urine 1	60	22	1.1	4.9%	1.0	4.7%
Urine 2	60	82	1.6	1.9%	2.4	2.9%

Mixed serum, plasma and diluted urine specimens, collected from adult patients, were assayed for urea nitrogen using the ATAC 8000 Random Access Chemistry System and another commercially available method. Results were compared by least squares linear regression and the following statistics were obtained.

Serum/Plasma Comparison

ATAC 8000 =
$$0.1 \text{ mg/dL} + 1.026 \text{ x Competitive Reagent}$$

r = 0.998 n = 206 range = $3 - 83 \text{ mg/dL}$

Urine Comparison

$$r = 0.996$$
 $n = 101$ range = 6 - 98 mg/dL

510(k) Notification, ATAC PAK BUN Reagent Kit, 22 March, 2000, p 56

The detection limit claim of 2 mg/dL is documented through the repetitive assay of a diluted serum control. The observed detection limit, calculated as two standard deviations of a 30 replicate within run precision study, is 1.8 mg/dL and is below the claimed limit.

The 14 day on board reagent stability and 7 day calibration stability claims are documented through the assay of serum controls and urine pools over the claimed periods. In all cases, the total imprecision of urea nitrogen recoveries over the test periods are less than 3 mg/dL or 3%.

Wynn Stocking

Manager of Regulatory Affairs

Elan Diagnostics

DEPARTMENT OF HEALTH & HUMAN SERVICES



MAY 2 4 2000

Food and Drug Administration 2098 Gaither Road Rockville MD 20850

Mr. Wynn Stocking Manager, Regulatory Affairs Elan Diagnostics 231 N. Puente Street Brea, California 92821

Re: K000958

Trade Name: ATAC PAK BUN Reagent and ATAC Calibrator

Regulatory Class: II Product Code: CDQ Dated: March 22, 2000 Received: March 24, 2000

Dear Mr. Stocking:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for <u>in vitro</u> diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

Steven I. Gutman, M.D., M.B.A.

Director

Division of Clinical Laboratory Devices

Steven Butman

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

510(k) Number (if known):							
Device Name:	ATAC PAK BUN Reagent and ATAC Cali	brator					
Indications For Use:							
intended for use as a system for th	cit, the ATAC Calibrator and the ATAC 8000 be quantitative determination of urea nitrogen and treatment of certain renal and metabolic dis	in seçum, plasma and urine. Urea nitrogen					
This reagent is intended to be used	d by trained personnel in a professional setting	g and is not intended for home use.					
Respectfully,							
Wynn Stocking Regulatory Affairs Manager Elan Diagnostics 22 March, 2000 (Division Sign-Off) Division of Clinical Laboratory Devices 510(k) Number							
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)							
Concurrence of CDRH, Office of Device Evaluation (ODE)							
Prescription Use (Per 21 CFR 801.109)	OR	Over-The-Counter Use					
	(Optional Format 1-2-96)						